



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,054	08/26/2003	Rolf Bruck	E-80656	7377
24131	7590	05/19/2006	EXAMINER	
LERNER GREENBERG STEMER LLP			MAZZUCA JR, DOUGLAS	
P O BOX 2480			ART UNIT	PAPER NUMBER
HOLLYWOOD, FL 33022-2480			3726	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/650,054	BRUCK, ROLF	
	Examiner Douglas E. Mazzuca	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 March 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) 11-22 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-10 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 26 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 8/26/2003.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1-10** are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1-10 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the claim amendment filed 3/01/06. Step "i" of claim 1 recites; "winding at least one of the sheet metal layer and at least one of the sheet metal stacks to form a honeycomb structure with smooth and corrugated sheet metal layers forming channels through which a fluid can flow". Therefore, the corrugating step, as stated in step "d", is not optional. As per the arguments filed on 3/01/06, applicant agrees that these steps are not optional, however, the term, "if required", is an optional limitation. Furthermore, as stated in step "i", at least one of the sheet metal stacks has to be made; therefore, steps "g" and "h" are also required steps.

"If required" is an optional limitation because there could be a) a corrugating step performed or b) no corrugating step performed. Similarly, there could be a) sheet metal stacks made, or b) no sheet metal stacks made. Therefore, for step "i" to be performed, the previous steps must be required steps.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Toshiaki (JP 01012018).**

Toshiaki discloses forming a honeycomb structure having a measurement sensor (40) and sheet metal layers forming a body structure (21) which allowing fluid to flow through the body structure, the body having a cohesive free volume (50) receiving said measurement sensor (40) comprising:

selecting a section of a sheet metal strip from a supply roll (22),

reading/identifying a hole position & edge (50-52) from a memory (i.e. "specified intervals" implies that the positions are measured and predetermined, and therefore are from "memory") to be formed in the sheet metal,

constructing the holes & edges (50-52) at the associated hole position,

repeating this process for the desired number of layers,

winding said sheets into a honeycomb structure with smooth (21) and corrugated metal layers (22) forming channels (30) through which a fluid can flow,

introducing the structure into a casing tube (11),

introducing the measurement sensor (40) into the structure & tube (see Figures 1-5).

Regarding claims 2-8, Toshiaki discloses the hole positions forming a cohesive cavity in the honeycomb body having a geometry which corresponds to the sensor's dimensions (40) (Figure 1). It is inherent that the cavity be larger by a predetermined tolerance (gathered both from empirical data i.e. measurements, and formed in a mathematical model to match different sensor sizes to different hole configurations) in order for the sensor to be accepted within the cavity. If the cavity were formed too small, the sensor would not fit within the honeycomb body making the structure useless, meanwhile if the cavity were formed too large the sensor would not mount properly.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiaki.**

Toshiaki discloses the claimed invention except for explicitly stating that the holes are of an oval shape, and the sensor is an HC or lambda sensor. It would

have been an obvious matter of design choice to form oval holes, and use such a sensor, since applicant has not disclosed that such a hole/sensor solves any stated problem or is for any particular purpose, and it appears that the invention would perform equally well with the hole/sensor of Toshiaki.

Response to Arguments

7. Applicant's arguments filed 3/1/06 have been fully considered but they are not persuasive.
8. In response to applicant's argument that step "d" is not optional, see the 35 USC 112 2nd paragraph rejection above.
9. Applicant argues that "Toshiaki discloses that the holes are drilled in the flat metal plate and the corrugated metal plate in the same operation. Accordingly, the holes are drilled in the corrugated metal plate after it has been corrugated." However, the claims do not preclude drilling holes after the metal plate has been corrugated. The step in claim 1 of "constructing at least one hole with the hole edge in the sheet metal layer at the at least one associated hole position and, if required, corrugating at least a portion of the section" is considered to be met by Toshiaki because in Toshiaki, it is not required to corrugate at least a portion of the section after drilling the holes because it has already been corrugated.
10. Applicant argues that Toshiaki does not disclose that the corrugated plate is corrugated after a flat sheet has a hole formed therein, however, the claims do not require this specific limitation.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas E. Mazzuca whose telephone number is (571)272-7813. The examiner can normally be reached on 7:30AM-4PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571)272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Mazzuca
05/03/2006

DEM


MARC JIMENEZ
PRIMARY EXAMINER
5-4-06